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December 15, 1999

Magalie Roman Salas
Office of the Secretary
Federal Communications Commission
445 Twelfth Street S.W.
Room TW-A325
Washington DC 20554

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Re: CC Docket No. 96-45

Dear Ms. Salas:

Enclosed are an original and nine copies of the Comments of the Regulatory Commission of Alaska in response to the CC Docket No. 96-45, Further Notice of Proposed Rulemaking, (FCC 99-204) released September 3, 1999. Please forward a copy of this filing to each of the Commissioners.

Sincerely,

REGULATORY COMMISSION OF ALASKA

G. Nanette Thompson
Chair

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Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	CC Docket No. 96-45
Federal-State Joint Board on	)	
Universal Service:	)	
Promoting Deployment and	)	
Subscribership in Unserved and	)	
Underserved Areas, Including	)	
Tribal and Insular Areas	)	

Comments of the

Regulatory Commission of Alaska

Date: December 15, 1999

G. Nanette Thompson
Chair

SUMMARY

The Regulatory Commission of Alaska (RCA) supports the efforts of the Federal Communications Commission (FCC) to promote universal service to unserved and underserved areas, including Native areas of the nation. About 75% of Alaskan communities have penetration rates under 80%, with some areas having local penetration rates between 20% and 50%. About 88% of all cities and villages in Alaska also have extremely low population (under 1000 people) and limited local calling areas. These low levels of universal service and limited local calling area are of special significance given Alaska's limited road system, high costs of service, harsh climatic conditions, and the isolation of most of our rural areas. The RCA therefore strongly supports broadly based federal universal service programs to assist rural areas of Alaska to improve penetration rates and to obtain access to critical services.

Include Internet Connection for Rural Areas:

The RCA recommends the FCC adopt mechanisms to promote local availability of Internet connections in areas where such connections are not likely to occur absent federal support. Federal funding to allow local access to the Internet would

greatly improve comparability of services between rural Alaska and nationwide urban areas and would improve quality of life in Alaska's most remote communities.

Fund Limited Extended Toll Calling Areas:

Extending federal funding to include coverage for limited toll calling in areas with extremely small local calling areas and for Lifeline customers would also help reduce the disparity between rural and urban local services and would promote universal service. The RCA supports the proposal by United Utilities, Inc. to provide federal support for $25 per month of intrastate long distance service and $100 for hook-up costs to Lifeline customers. The FCC should also consider a pilot program to evaluate the Arizona proposal to fund line extensions. Penetration rates for low-income households would also likely improve with better Lifeline/Linkup outreach efforts.

Consider Alaska's Special Status Regarding "Tribal Lands":

The RCA requests that whatever federal programs are available to Native Americans in the Contiguous United Status also be available in Native areas of Alaska. For purposes of universal service in Alaska, the RCA believes the FCC should not

place great weight on whether "tribal lands" meet a technical or legal standard, such as exists for Indian Country. Nor should the FCC view the general lack of reservations in Alaska as reason to deny funding to Alaska Native areas. Many rural areas where Alaska Natives live experience low local penetration, high poverty, isolation, and other factors similar to Native areas throughout the nation and are equally in need of support. The RCA suggests the FCC meet with the RCA and other interested parties to develop the best policy for determining which geographic areas of Alaska should be eligible for funding under Native programs.

Provide Funding to Rural Native Communities:

In Alaska, Native and non-Native customers live in the same villages, use the same utility infrastructure, and face the same problems obtaining affordable service. The RCA therefore believes that whatever funding is available should be applied to the areas served. It would be administratively difficult for a company to distinguish between Natives and non-Natives and may be inconsistent with state anti-discrimination statutes.

Seek State Concurrence With Study Area Restructuring:

The FCC has also suggested study area changes to promote service to Native lands. Study area changes should not occur unless the state commission agrees to (or does not object to) such restructuring. Changing study areas could lead to rate increases and reduced universal service support levels for both Native and non-Native Alaskans. Such changes should not occur without proper review and agreement of the RCA.

The Regulatory Commission of Alaska Retains Primacy Over Intrastate Telecommunications Services:

In Alaska, there is no need, nor does the FCC have jurisdictional authority to control intrastate rates for local and Lifeline services, Eligible Carrier Status, Local Calling Area designations, carrier of last resort designation for intrastate services, or selection of which carrier(s) should provide service to unserved areas. In Alaska, these matters are within the jurisdictional authority of the RCA, which has the regional presence and local experience to best address these matters. The RCA's jurisdiction applies to both Native and non-Native areas of the state. The FCC should assert jurisdiction over Eligible Carrier Status only when a state commission fails to claim jurisdiction in response to a carrier request for such

status.

Do Not Adopt a Broad Definition of Unserved Areas:

The RCA also believes the FCC should not adopt its proposed definition of Unserved Area, as this proposal is too broad. If the FCC does adopt a definition for Unserved Area, the definition should be treated as a guideline and not a state mandate.

Do Not Require Competitive Bidding in Unserved Areas:

The RCA requests the FCC not require states to employ a competitive bidding process for determining which carrier should serve an unserved area. In most rural areas of Alaska there are no local competitors to make such a system workable.

Support Rural Health Care Services:

As a last point, in Alaska, rural health care providers report that services are not always available. The FCC could assist rural health care in Alaska by:

i) Allowing federal universal service funding for infrastructure development to improve availability of useful, affordable, higher bandwidth services in rural areas;

ii) Facilitating rural health care providers joining with

other entities when seeking federally supported services; and

iii) Requiring satellite providers serving the western United States to include Alaska within their satellite footprint. This requirement would benefit not only the rural health care providers, but all Alaskans.

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Tribal and Insular Areas	)	

Comments of the
Regulatory Commission of Alaska

The Regulatory Commission of Alaska (RCA)[1] welcomes the opportunity to respond to the Further Notice of Proposed Rulemaking (FNPRM), released by the Federal Communications Commission (FCC) on September 3, 1999, in CC Docket 96-45 (See FCC 99-204). The FNPRM sought comments and data to help formulate federal policies to improve service to underserved and unserved areas of the nation, including tribal lands and insular areas.

The RCA, in conjunction with Lieutenant Governor Ulmer

1 The RCA is the successor agency to the Alaska Public Utilities Commission, and has the same jurisdictional authority and responsibilities of the former.

for the State of Alaska, held a public meeting on November 3, 1999, to obtain public and industry comment on the FNPRM. The RCA's response to the FNPRM submitted herein takes into consideration the information provided at that public meeting as well as the RCA's familiarity with Alaska issues.

I. Subscribership for local service in many areas of Alaska remains low.

Many rural areas of Alaska have exceedingly low subscribership to local service. About 75% of all communities in Alaska have penetration rates below 80%, with many locations below 50%, based on the last Census (See the map and data of Attachments 1 and 2). Attachment 1 also provides statistics on average annual income and other demographic information. As can be seen from this attachment, the areas with lower household incomes tend to have lower penetration rates.

The last Census remains the best available source of statewide statistics on household demographics and telephone penetration. It would be extremely difficult and costly to update the 1990 penetration and household demographic statistics because of the vast geographic area

the survey would need to cover, the fact that more than 200 rural locations in Alaska are remotely located and not accessible by road, and the variety of Native languages/dialects spoken in Alaska. Understanding the critical need for these data, however, the Denali Commission[2] is conducting a statewide survey cataloguing rural utility services. The results of this survey will not be available for several months.

II. Local service is generally available in Alaska, but rural calling areas are very limited. Many areas are in need of infrastructure upgrade and improved service quality at affordable rates.

Virtually all communities in Alaska have access to basic local exchange service,[3] though quality of service problems exist at some locations. For example, the RCA recently received public comment that local service to St. Paul, Alaska was affected by rain due to antiquated equipment. Other locations have difficulties due to unreliable power.

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2 The Denali Commission is a congressionally created federal and state partnership whose purpose is to investigate rural Alaska services, infrastructure, economic issues, as well as other matters.

3 The RCA has a limited number of pending complaints from isolated Alaskans requesting access to the local phone network (e.g., Goose Creek Subdivision of Thorne Bay). The RCA is investigating these complaints at this time.

The RCA has not yet inventoried the communities requiring infrastructure development or other improvements to bring local service quality and reliability up to levels found in urban areas. The Denali Commission survey will be useful in this regard.

Local service in rural areas is generally costly to provide. This is due in large part to the remoteness of the locations served, lack of roads, regional labor costs, terrain considerations, short construction season, harsh climatic conditions, and low economies of scale associated with providing service to exchanges with few customers. All rural local exchange carriers in Alaska receive federal universal service high cost support.[4] This support, combined with intrastate high-cost support, allows local rates in Alaska to range between approximately $10.00 to $38.00 per month, in addition to the Subscriber Line Charges and toll calling costs.

Local service in Alaska rural areas is very

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4 GTE Alaska, Inc. receives federal switching, but not loop universal service support. All other rural local carriers receive both switching and loop federal support.

different from local service provided in most other areas of the nation. Most Alaskan rural exchanges include extremely few access lines and do not include access lines for critical services. For example, in most Alaska rural areas, a call to the law enforcement authority or the nearest medical service provider is a toll call.

Seventy percent of the calling areas in Alaska have less than 250 access lines:

Access Lines	Number of Exchanges	Percent of Total
50,000 or more	1	0.4%
5,000 to 49,999	12	4.9%
1,000 to 4,999	28	11.5%
500 to 999	7	2.9%
250 to 499	22	9.0%
100 to 249	73	29.9%
50 to 99	52	21.3%
Under 50	49	20.1%
Total:	244	100.0%

About eighty-eight percent[5] of all cities and villages in Alaska are in isolated, rural areas that have extremely low population (under 1000 people). Details regarding the local calling area by community and serving carrier

5 1990 Census of Population and Housing, Summary Social, Economic, and Housing Characteristics, Alaska, Table II.

are identified in Attachment 3.

The limited local calling area strongly affects how rural Alaskans conduct their day-to-day business. Most rural communities, by their size and remoteness, normally do not have the local infrastructure (e.g., large libraries, universities, business centers) available in urban areas. Customers are generally unable to place a local call to contact public safety departments; local, state or federal government agencies; the closest hospital or doctor; colleges; emergency services; or the nearest metropolitan areas. Only Anchorage, Fairbanks, and Juneau public libraries have over 100,000 books and serials available for viewing.[6] Many locations have no local access to the police. Emergency services are often limited to the urban areas of the state.[7] Further

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6 Statistics of Alaska Public Libraries, FY 1992 and FY 1993, Table 2.

7 "[Alaska's] 16 boroughs should not be viewed in the emergency context as being the equivalent of county governments. Only in the three unified home rule municipalities will one find municipally run emergency services similar to county style agencies. In the other 13 boroughs, area wide powers focus on education, land use planning, and tax assessment/collection. Emergency services, if any, are highly centralized and provided by scattered, independent service areas." (Alaska Emergency Operations Plan, Division of Emergency Services of the Alaska Dept. of Military and Veterans Affairs, 1994, at 1.)

complicating this situation is the fact that over ninety percent of all communities in Alaska, including the state capital, are not accessible by road. As a result, rural residents do not have the option of driving to an urban center to find health or emergency services, conduct research, obtain information, or gain access to broad educational opportunities, governmental agencies, or job opportunities. Attachments 3 and 4 show those few locations with public road or a railway line access. To illustrate our lack of roads, Alaska has well over twice the area of Texas, but has about the same miles of roadway as Vermont.[8] In many areas, establishing any road would require Congressional action because of the wilderness designation of lands surrounding many villages.

In Alaska, lack of surface transportation makes aviation the prime mode of transportation in rural areas.[9] This heavy reliance on aviation, which is

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8 Alaska has a total area of 615,230 square miles, but has only about 13,000 miles of road. Vermont has an area of 9,600 square miles, with 14,100 miles of road. Statistical Abstract of the United States 1994, U.S. Department of Commerce, at 223, 624 (9/24).

9 For example, transportation to village clinics in the Aleutian/Pribilof Island area is by five passenger plane available

restricted by weather conditions, increases the dependency upon telecommunications as well as the costs of all basic community services. Given this situation, rural Alaskan locations are heavily dependent upon toll service, most of which is satellite based.

III. While voice grade toll services are generally available throughout the state, many other telecommunications services commonly found throughout the nation are not offered in rural areas of Alaska. When such services are available, they are offered at a high price.

Long distance voice grade service is generally available throughout Alaska to communities of 25 or more. At this time the Commission has received complaints from only one or two areas where customers contend service is unavailable, though there are several areas of the state where customers complain of inferior quality service.

Toll service to consumers in Alaska is expensive in part because of the State's dependence on satellite technology coupled with the State's remotely located, sparse population. For example, Alascom, Inc. d/b/a AT&T Alascom (AT&T Alascom) states that it has currently spent

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only twice per week, weather permitting. See Comments of the Aleutian/Pribilof Island Assoc. in response to the Public Meeting.

$44.6 Million to launch and install the Aurora III satellite[10], and expects to spend approximately $65 Million more on the Aurora III project in 2000. When completed, the annual maintenance and operating costs of Aurora III are expected to be about $8 Million per year. In addition, AT&T Alascom states that it spent $24 Million to upgrade 82 earth stations to Demand Assigned Multiple Access (DAMA) satellite technology. AT&T Alascom reports it expects to spend an additional $11M in digital and DAMA upgrades by January 2001. It is important to keep in mind that all of these costs are associated with providing service to less then 400,000 access lines statewide.

As another example, the most recent report filed by General Communication, Inc. (GCI) regarding its installation of 50 rural DAMA satellite project sites showed a typical remote site earth station investment cost ranging between $300,000 and $550,000, with many of the remote locations serving less than 50 customers. The

10 Aurora III is the replacement for current satellite Aurora II which is scheduled to reach the end of its useful life in the next few years.

report showed the total remote 50-site investment at $28.3 Million. These costs do not include the costs of common and other centralized investment ($3 Million), and satellite transponder costs which can be extremely high (estimated at $120,000 per month per transponder by an AT&T Alascom representative).

The RCA has incomplete data regarding the per customer bills for toll service. GCI reported that its 50 rural DAMA site customers had long distance bills of about $45 to $50 per month. Other anecdotal evidence was provided by Mr. Propes of McGrath who claimed that he was able to obtain presumably business rate toll service at $.24 to $.25 per minute under a three-year contract. The least expensive residential intrastate toll plans in Alaska are currently running at about $.14 per minute.

Few technological alternatives to satellite service exist given the State's vast distances, remote locations, difficult terrain, climate/soil factors, and lack of roads. Until an improved technology comes along, long distance services in Alaska are likely to remain costly.

IV. Rural Alaska has limited affordable, access to local Internet connections, high-speed data communications, and high bandwidth services that are commonly available in other areas of the nation.

Given the lack of roads and limited local access to critical services, Alaskans must carefully coordinate all activities with a high reliance on telecommunications services. Communications access through the Internet and data transmission often offer an important substitute for the lack of local resources in isolated, rural communities. These services provide access to key information data bases and communications forums essential for economic and personal development, education and productivity, and greater efficiencies in the workplace and at home. When these services are unaffordable or unavailable, a rural location will fail to keep pace with its urban counterpart as society becomes increasingly reliant upon electronic communications for many of its daily activities.

Local Internet services are not available in many rural Alaskan locations. Local Internet would not have occurred in McGrath, Alaska, except that McGrath Light &

Power, a subsidiary of Native owned MTNT, Ltd, developed a unique initiative.

McGrath, faced with a dwindling population and lack of commercial development, set up a high quality local Internet system to provide people with an opportunity to raise commerce and increase educational and social standards. The system, which has received great local support, was expensive and faced other difficulties:

> Realizing that the up-front cost for people to get on the wireless [Internet] system was high ($995.00 for individual subscribers) we added eight 33.6KB modems for dial-up access until such time as they could afford to move over to the wireless. The advantage of the wireless is a much faster data transfer rate plus the added benefit of not needing to log off.[11]

> With the subscribers we have at the present time we are receiving $1,666.00 per month in access fees. Our fixed expenses for the modem lines, 128KB pipe and access to the Internet Backbone is approximately $2,400.00 per month. Adding labor, utilities and additional expenses the total cost of providing this service is around $3,000.00 per month.[12]

McGrath charges about $40 per month for residential access and about $70-75 per month for business Internet

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11 Letter to the RCA from Ernie Baumgartner, McGrathAlaska.Net, at 1, November 10, 1999.

12 McGrath letter at 2.

access. The Internet service in McGrath has only been running a few months and per customer costs are likely to decrease, but it remains uncertain if the system will break even and can survive without community support.

Similarly the Rural Coalition[13] reports high costs for rural Internet access:

> Internet service in and around Kotzebue, like most rural parts of the State of Alaska, is delivered by satellite. The cost of providing Internet service includes: (1) the cost of a satellite connection; (2) the cost of interconnecting OTZ's central office switch with either the GCI or AT&T satellite dish, and (3) the cost of Internet hardware and software. The cost of the satellite connection alone is approximately $1,500 per month. In Kotzebue, these costs are spread over several hundred Internet users, which results in OTZ charging a monthly rate of about $45. However, the communities surrounding Kotzebue are much smaller and the costs of Internet service must therefore be spread over a much smaller group. Noatak, for example, has 117 subscriber lines and Shungak has only 80.[14]

The Rural Coalition indicates that for some of the smaller rural locations, the cost of Internet access

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13 The Rural Coalition is a group of 13 local exchange carriers: Alaska Telephone Co.; Arctic Slope Telephone Assoc. Coop., Inc.; Bettles Telephone Co.; Bristol Bay Telephone Coop., Inc.; Bush-Tell, Inc.; Copper Valley Telephone Coop., Inc.; Interior Telephone Co., Inc.; Ketchikan Public Utilities; Matanuska Telephone Assoc.; Mukluk Telephone Co.,Inc.; North Country Telephone Co.; Nushagak Telephone Coop., Inc.; and OTZ Telephone Coop., Inc.

14 Comments of the Rural Coalition at 2, 11/10/99, in response to the November 3, 1999, Public Meeting.

could reach over $150 per month per customer.

In rural Alaska, access to the Internet via expensive long-haul interexchange satellite circuits, coupled with the very small number of rural subscribers makes Internet access unattainable in many areas. Federal funding to allow local access to the Internet would greatly improve comparability of services between rural Alaska and nationwide urban areas and would improve quality of life in Alaska's most remote areas.

The RCA believes that as long as local Internet access in rural Alaska is not provided or is unaffordable, rural areas of the State will be at a social and economic disadvantage relative to urban Alaskan areas and the rest of the nation, where over half of the entire adult population of the country uses the Internet. NUA Internet Surveys, November 10, 1999.

Broadband services are also critically limited in rural Alaska. While customers may have broadband capabilities locally, it is often of little value given the limited local calling areas and opportunities locally to access key resources. Comments provided to the RCA at

its public meeting, as well as evidence on file, suggests that limitations on broadband services are due to limitations in the satellite dependent interexchange network. For example, the two major facilities based interexchange carriers in Alaska report that their customers can receive a dial-up data speed of about 14.4 kbps (at times reaching 33.6 kbps) when digital satellite services are available. AT&T Alascom implies that while it may be technically capable of providing Frame Relay and T-1 service, such services may not be available at all locations unless there is sufficient demand and the costs of deploying the service can be recovered.[15] The RCA notes that rural customers often cannot obtain high speed data services, switched 56, Frame Relay, or ISDN, and when such service is available, it is expensive.[16]

Many rural communities are still using first generation analog interexchange earth stations installed in the mid- to late 1970's. These communities are at a disadvantage for two technological reasons: (1) analog

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15 Letter from AT&T Alascom to the RCA, November 22, 1999, at p. 1.

16 For example, the Aleutian/Pribilof Islands Association